Original Research Article

A Study to Assess the Anxiety Level among People Residing in Various Parts of Assam during COVID-19 Pandemic: A Web-Based Cross-Sectional Study

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ABSTRACT

COVID-19 pandemic is seen to create a panic situation among the people, keeping mental health at stake. Therefore monitoring the mental health during such crisis is an immediate priority. The purpose of this study was to assess the anxiety level among people residing in various parts of Assam during the COVID-19 pandemic. The objective of the study is to find the level of anxiety among the people and also to find the association between the demographic data. A total of 150 people living in Assam participated in this cross-sectional web-based study. A standardized anxiety related questions based on (coronavirus anxiety scale) was generated using the Google Form, and the link was shared through social media- WhatsApp. Data collection was done within 5 days by the Google form. The result was analyzed using both descriptive and inferential statistics. Among 150 people 43.3% is the highest who have mild anxiety, 12.7% have moderate anxiety, 3.3% have severe anxiety and 40.7% have no anxiety. The chi square indicates that there is a significant relationship between anxiety and age of the respondents (Chi-square with 3 degree of freedom = 33.3946, p<0.05*) and the age group of 25-34 years have the highest level of anxiety. It is expected that both the government and the people together can fix this pandemic and reduce the anxiety level.

Keywords: COVID-19; Anxiety; pandemic; cross-sectional web-based study; coronavirus anxiety scale; mental health.

INTRODUCTION

Anxiety is a normal phenomenon, which is characterized by a state of apprehension or uneasiness arising out of anticipation of danger.[1] COVID-19 also made people anxious about the current situation.

COVID-19 started in December 2019, like a viral outbreak in Wuhan city of central Hubei province of china (Holshue et al. 2020). World health organization (WHO) along with Chinese authorities started working together and the etiological agent was soon established to be a new virus was named as Novel coronavirus(2019- nCov).[2]

On 11th January 2020 china announced its first COVID-19 related death of a 61 year old man, exposed to sea food market (WHO, 2020a). over a period of weeks the infection spread across the globe in rapid space (WHO, 2020b).[3] On the 11th March, WHO declared COVID-19 a pandemic as by then 114 countries were affected (WHO,2020c).[4]

Novel coronavirus disease (COVID-19) has spread throughout the whole world. This phenomenon has led to a massive public reactions; the media has been reporting continuously across borders to keep all informed about the pandemic situation. All these things are creating a lot of concern for people leading to heightened levels of anxiety. Pandemics can lead to heightened levels of stress; Anxiety is a

common response to any stressful situation. This study attempted to assess the anxiety among adult Assam population during the COVID-19 pandemic. [5]

Meanwhile, India reported its first coronavirus on 30th January 2020 in the state of Kerala. The affected person had travel history from Wuhan, China. At present total cases of India are-1,531,783 where 34,224 person are death and 988,583 persons were recovered.[6]

Also the first case of Assam was reported on 31st March 2020, the person detected was a 55 year old man from Silchar, he had a travel history from Delhi and stayed near the Nizamuddin area. Till now the government has confirmed a total of 33,576 positive cases including 25,402.[7]

MATERIALS AND METHODS
Study Design: Descriptive cross-sectional study
Study Setting: Various parts of Assam.
Study Population: Both male and female above 18 age group
Sample Size: 150

Sampling Technique: Snowball sampling technique
Tools used in the study: Data collection was done online with Google form
Tool 1: Contains the items of demographic characteristics of people comprising age, address, education, occupation, community, area-rural or urban, marital status.
Tool II: Self structured anxiety scale or modified standardized anxiety scale (Coronavirus Anxiety Scale).[8]

Data Collection Procedure
Data was collected from 16th august 2020 to 20th august 2020 from different parts of Assam. A Google form of questionnaire was created using the CAS (Coronavirus Anxiety Scale) and circulated through the WhatsApp, on receiving and clicking the link, the participants got auto directed to the information about the study and informed consent. After their acceptance to take the survey they filled up the answer. The responses were directly collected in the Google form itself and we kept 5 days to get total 150 response.

Analysis and Findings
Table 1.1: Distribution of people residing in various parts of Assam to their demographic variables N = 150

Sl. No.	Demographic Variables	Categories	Frequency	%
1.	Age In Years	18- 24 years	46	30.7%
		25-34 years	83	55.3 %
		35 - 44 years	12	8 %
		45 and above	9	6 %
2.	Gender	Male	50	33.3%
		Female	100	66.7%
3.	Education	High School	01	0.7%
		Middle School	01	0.7%
		Higher Secondary School	23	15.3%
		Graduate And Above	125	83.3%
4.	Occupation	Service	80	53.4%
		Business	11	7.3%
		Farmer	2	1.3%
		Others (Housewife, Students etc)	57	38%
5.	Religion	Hindu	133	88.7%
		Christian	7	4.7%
		Muslim	8	5.3%
		Others	2	1.3%
6.	Area	Rural	66	44%
		Urban	84	56%
7.	Marital Status	Married	49	32.7%
		Single	100	66.7%
		Divorced	1	0.6%

FROM TABLE 1.1: It is evident that, majority of the people 83(55.3%) were in the age group 25-34 years and are female whose maximum education were graduate and above 125(83.3%). Most of the people occupation was service 80(53.4%) where

majority 133 (88.7%) were Hindu and belong to urban 84(56%) area with most of the single ladies 100(66.7%) have the highest anxiety level.

Table 1.2: Frequency and percentage distribution of respondents on anxiety level during covid-19   N = 150

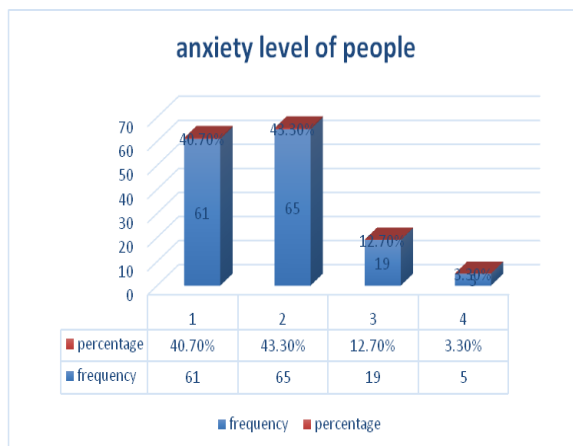| Anxiety Level	Frequency	Percentage
No Anxiety	61	40.7%
Mild Anxiety	65	43.3%
Moderate Anxiety	19	12.7%
Severe Anxiety	5	3.3%
Total	**150**	**100%**

Figure 1.2: Distribution of anxiety level of people residing in various parts of Assam

Table 1.3: Association between anxiety level among the people during COVID-19 and the selected demographic variables N = 150

Variables	Anxiety				X^2	df	P value
	No anxiety	Mild anxiety	Moderate Anxiety	Severe anxiety			
Age In Years					33.3946	3	<0.000* Sig
a)18 – 24 years	26	16	26	0			
b)25 – 34 years	35	43	35	2			
c)35- 44 years	9	3	9	0			
d)45 and above	6	1	6	3			
Gender					0.6612	3	0.882 NS
A)Male	27	20	6	1			
B) Female	49	43	13	4			
Education					8.5635	3	0.478 NS
A)High School	1	0	0	0			
B)Middle School	1	0	0	0			
C)Higher Secondary	58	58	15	5			
D)Graduate and above	16	5	4	0			
Occupation					8.9798	3	0.439 NS
A)Service	7	4	0	7			
B)Business	2	0	0	2			
C)Farmer	32	21	8	32			
D)Others (Housewife, Students etc)	35	38	11	35			
Religion					1.6324	3	0.331 NS
A)Hindu	57	55	17	4			
B)Muslim	2	4	1	1			
C)Christian	2	4	1	0			
D)Others	0	2	0	0			
Area					2.6614	3	0.447 NS
A)Rural	38	23	9	2			
B)Urban	38	40	10	3			
Marital Status					3.7613	3	0.474 NS
A)Married	18	23	6	2			
B)Single	43	41	13	3			
C)Divorce	0	1	0	0			

*S = Significant   NS = Not significant

FROM FIGURE 1.3

The above study reveals that there is a association between anxiety and age factor at df = 3, χ^2 = 33.3946 and where the association between the other demographic data are not significant. Further there is no significant association between Gender, education, occupation, religion, area and marital status as indicated by χ^2 value.

RESULT

Result showed that there was mild anxiety level (43.3%), moderate anxiety level (12.7%), severe is (3.3%) and no anxiety is (40.7%) among people residing in various parts of Assam and the highest was in the age group of 25-34 years. There is no other association with other demographic variables except age.

DISCUSSION

The main objective of this study is to measure the levels of anxiety among the people during COVID 19 disease. However after analysing the result it is clear that 60% of the study subjects are anxious, having mild to severe symptoms of anxiety by the augmentation of COVID -19. The above study reveals that there is a association between anxiety and age factor at df = 3 , χ^2 = 33.3946 and the age group of 25-34 years are the most affected one.

A similar study was done by Md. Akhtarul Islam, Sutapa Dey Barna, Hasin Raihan, et al on Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey. Around 15% of the students reportedly had moderately severe depression, whereas 18.1% were severely suffering from anxiety. The binary logistic regression suggests that older students have greater depression (OR=2.886, 95% CI = 0.961-8.669). It is also evident that students who provided private tuition in the pre-pandemic period had depression (OR = 1.199, 95% CI = 0.736-1.952).[9]

In the present study it was found that there was no significant association between anxiety level with the occupation which is a contrast to this study on mental health implications of COVID-19 pandemic and its response in India was done by Adrija Roy, Arvind Kumar Singh and Ojaswini Bakshi to review the prevailing mental health issues through PubMed electronic database and Google scholar. The result was reported with major mental health issues among older people and frontline workers.[10]

CONCLUSION

The current situation of COVID-19 has affected the mental health of many people. This study has found that anxiety is also one of the associated factors which the people had never experienced before. People need to be made aware of self relaxation technique and self care measures for themselves and their families. Having regular healthy meals, proper sleep, ventilation of feelings can help to relief or reduce anxiety level. These are the urgent needs to prevent further deterioration of mental health status.

Recommendations

- A further comparative study can be done between COVID-19 in the year 2020 and 2021.
- Intervention studies can be done to decrease the anxiety level and to check its effectiveness.

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